

Remarks

This is a Response to the Official Action dated March 18, 2005.

Claims 1-20 and 23-24 are currently pending in the Application.

Telephone conference

The Applicant thanks the Examiner for the many courtesies extended during the telephone conference held with Attorney Alex Krayner, and Attorney Robert Popa (Reg. No. 43,010), on March 30, 2005. During the telephone conference it was agreed that the cited reference Liu (U.S. Patent No. 6,165,861) does not disclose that the “metal plug contact contacts said field oxide layer” as recited in Claims 23 and 24.

Allowable Claims

The Applicant acknowledges with gratitude the Examiner's indication of allowability as to Claims 1-8 and 17-18.

Claims 1-24

This response amends Claims 1 and 5 to clarify the language of the claims. This response amends Claims 9, 13 and 23-24 to clarify the scope of the invention. Specifically, Claims 9 and 13 are amended to recite a “metal plug contact having a first surface and a second surface opposite said first surface, said metal plug contact disposed outside said contact region, wherein said second surface of said metal plug contact is disposed above said field oxide layer and in contact with a dielectric material, wherein said metal plug contact is electrically isolated from said contact region” and “a metal connected to said first surface of said metal plug contact.” Claims 23-24 are amended to recite “said field oxide layer comprises said dielectric material.”

35 U.S.C. §102(e) Rejection

Claims 9-16 and 19-20 stand rejected under 35 U.S.C. §102(e) as being anticipated by Liu (U.S. Patent No. 6,165,861). Applicants respectfully disagree.

The Examiner is reminded that “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” MPEP 2131 quoting *Verdegaal Bros. V. Union Oil Co, of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The Examiner is also reminded that “[the] identical invention must be shown in as complete detail as is contained in the ... claim.” MPEP 2131 quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The Applicants submit that Liu does not teach each and every element as set forth in the rejected claims. In particular:

Claim 9

Applicant submits that Liu does not disclose, suggest or teach, *inter alia*, at least the following features recited by Claim 9, as amended, of the present application:

“...a metal plug contact having a first surface and a second surface opposite said first surface, said metal plug contact disposed outside said contact region, wherein said **second surface** of said metal plug contact is **disposed** above said field oxide layer and **in contact with a dielectric material**, ...” (emphasis added)

The Examiner asserts that a “metal plug contact” as recited in Claim 9 is disclosed by Liu’s “metal plug 24.” See page 3, line 3 of the Official Action. The Examiner also asserts that a “field oxide layer” as recited in Claim 9 is disclosed by Liu’s “field oxide 12.” See page 3, line 2 of the Official Action.

Applicant respectfully submits that Liu discloses an electrically conducting “polysilicon layer 16” disposed between Liu’s “field oxide 12” and Liu’s “metal plug 24.” See Figure 7 of Liu. Therefore, Liu does not teach, disclose or suggest “said second surface of said metal plug contact is disposed above said field oxide layer and in contact with a dielectric material” as recited in amended Claim 9. Hence, Claim 9 is patentable over Liu and should be allowed by the Examiner.

Claims 10-12 and 19, at least based on their dependency on Claim 9, are also believed to be patentable over Liu.

Claim 13

Applicant submits that at least for the reasons stated above, Liu does not disclose, suggest or teach “said second surface of said metal plug contact is disposed above said field oxide layer and in contact with a dielectric material” as recited in amended Claim 13. Hence, Claim 13 is patentable over Liu and should be allowed by the Examiner. Claims 14-16 and 20, at least based on their dependency on Claim 13, are also patentable over Liu.

Information Disclosure Statement (IDS) submitted on April 28, 2005

In the IDS submitted on April 28, 2005, Applicants disclose an Office Action issued on February 10, 2005 in a corresponding pending U.K. patent application.

In section 3 of the U.K. Office Action, the UK Examiner asserts that U.K. Claims 9-11 and 13-15 (corresponding to the U.S. Claims 9-11 and 13-15 as submitted with the Appeal Brief dated February 24, 2005) are allegedly anticipated in view of Sun (US 5,345,105). Applicants respectfully disagree and submit that Sun does not teach, disclose or suggest each and every element as set forth in the currently submitted Claims 9-11 and 13-15 should the U.S. Examiner feel inclined to make similar rejections.

Claim 9

Applicant submits that Sun does not disclose, suggest or teach, *inter alia*, at least the following features recited by Claim 9, as amended, of the present application:

“...field oxide layer disposed on a semiconductor substrate adjacent a contact region ...” (emphasis added)

Applicant respectfully submits that Sun does not teach, disclose or suggest a contact region. Therefore, Sun does not teach, disclose or suggest “field oxide layer disposed ... adjacent a contact region” as recited in amended Claim 9.

Hence, Claim 9 is patentable over Sun and should be allowed by the Examiner. Claims 10-11, at least based on their dependency on Claim 9, are also believed to be patentable over Sun.

Claim 13

Applicant submits that at least for the reasons stated above, Sun does not disclose, suggest or teach “providing a field oxide layer disposed on a semiconductor substrate adjacent a contact region” (emphasis added) as recited in amended Claim 13. Hence, Claim 13 is patentable over Sun and should be allowed by the Examiner. Claims 14-15, at least based on their dependency on Claim 13, are also patentable over Sun.

Conclusion

In view of the above, reconsideration and allowance of all the claims are respectfully solicited.

The Commissioner is authorized to charge any additional fees which may be required or credit overpayment to deposit account no. 12-0415. In particular, if this response is not timely filed, then the Commissioner is authorized to treat this response as including a petition to extend the time period pursuant to 37 CFR 1.136 (a) requesting an extension of time of the number of months necessary to make this response timely filed and the petition fee due in connection therewith may be charged to deposit account no. 12-0415.

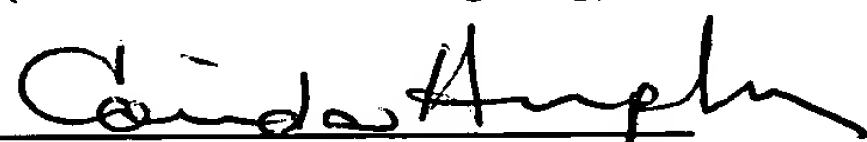
I hereby certify that this correspondence is being deposited with the United States Post Office with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

May 23, 2005

(Date of Deposit)

Corinda Humphrey

(Name of Person Signing)

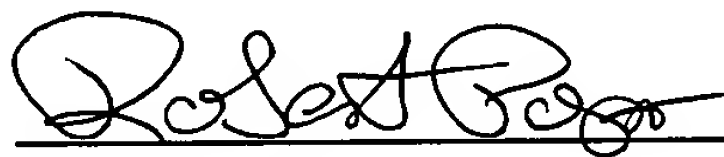


(Signature)

May 23, 2005

(Date)

Respectfully submitted,



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